

Science4you 4114

Science4you Marker Maker for Kids - Instruction Manual

Model: 4114

INTRODUCTION

Welcome to the Science4you Marker Maker for Kids kit! This manual provides detailed instructions for assembling and using your new creative science kit. Designed for children aged 6 and above, this kit allows you to explore the fascinating world of colors and scents by creating your own washable markers. Follow these guidelines to ensure a safe and enjoyable experience.

This kit encourages the development of motor skills, creativity, vocabulary, reasoning, and general learning, aligning with STEAM methodology.



Figure 1: The Science4you Marker Maker Kit packaging, illustrating the contents and target age group.

Safety Information

WARNING: CHOKING HAZARD - Small parts. Not for children under 3 years.

- Always use this kit under direct adult supervision.
- Do not ingest any components or liquids from the kit.
- Wash hands thoroughly before and after handling materials.
- Avoid contact with eyes. In case of contact, rinse immediately with plenty of water and seek medical advice if irritation persists.
- Keep all components away from pets and infants.
- Dispose of waste materials responsibly according to local regulations.

Kit CONTENTS

Please verify that all the following items are present in your kit:

- Marker box
- Marker pieces (barrels, caps, tips, filters)
- Modelling wire
- Colorants (e.g., red, yellow, blue)
- Scented solutions
- Measuring tools (e.g., pipettes, beakers)
- Tweezers
- Instruction sheets for various activities
- Other essential components for specific experiments

If any items are missing or damaged, please contact Science4you customer support.



Figure 2: An overview of the kit's components, including the marker assembly station, colorants, and tools.

SETUP

1. **Prepare Your Workspace:** Choose a clean, flat surface. Cover the area with newspaper or a protective mat to prevent staining.
2. **Gather Materials:** Ensure all kit components are within reach. You may also need a small cup of water for cleaning or diluting.
3. **Review Instructions:** Before starting any activity, read the specific instructions for that activity carefully.

OPERATING INSTRUCTIONS

1. Making Washable and Scented Markers

This activity allows you to create custom markers with unique colors and scents.

1. **Select Colors:** Choose the primary colorants you wish to mix. Refer to the online educational book for color mixing guides.
2. **Mix Colors:** Using the provided pipettes, carefully add drops of colorant into a small beaker or mixing tray. Experiment with different ratios to create new shades.
3. **Add Scent (Optional):** If desired, add a few drops of the scented solution to your color mixture.
4. **Prepare Marker Barrel:** Take a marker barrel and insert a filter.
5. **Fill Filter:** Place the filter into the color mixture, allowing it to absorb the liquid. Use tweezers to handle the filter.
6. **Assemble Marker:** Once the filter is saturated, carefully insert it into the marker barrel. Attach the marker tip and then the cap securely.
7. **Test Your Marker:** Draw on a piece of paper to test your new marker.



Figure 3: Demonstrating the process of filling a marker filter with a custom color mixture.



Figure 4: Enjoying the scented markers created with the kit.

2. Exploring Color Mixing and Other Activities

The kit includes materials for various experiments beyond basic marker creation. Refer to the online educational book for detailed instructions on these activities:

- **Multicolor Markers:** Learn techniques to create markers with multiple colors or gradient effects.
- **Invisible Ink Markers:** Discover how to make and use invisible ink.
- **Rainbow Projector:** Instructions for assembling and using the rainbow projector.
- **3D Hand Art:** Guide to creating a 3D hand effect using the kit's tools.



Figure 5: Children engaging in diverse creative activities using the Science4you Marker Maker kit.

Educational book online



Figure 6: Accessing the online educational book for detailed activity instructions and color mixing guides.

MAINTENANCE

- **Cleaning:** After each use, rinse mixing tools and the marker assembly tray with water. Ensure all components are dry before storage.
- **Storage:** Store all kit components in their original packaging or a designated container in a cool, dry place, away from direct sunlight.
- **Marker Care:** Always cap markers tightly after use to prevent them from drying out.

TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Marker does not write.	Filter not fully saturated; marker tip dry; cap not sealed.	Ensure filter is completely soaked. Re-wet tip if dry. Check cap is securely fastened.
Colors are not mixing as expected.	Incorrect ratios of colorants; insufficient mixing.	Refer to the online guide for recommended color ratios. Mix thoroughly before filling the filter.
Scent is too faint or too strong.	Incorrect amount of scented solution added.	Adjust the number of scented solution drops in future mixes.

SPECIFICATIONS

- Model Number:** 4114
- Product Dimensions:** 11.81 x 12.13 x 2.36 inches
- Item Weight:** 13 ounces
- Recommended Age:** 6+ years
- Contents:** 65 pieces (approx.)
- Manufacturer:** Science4you

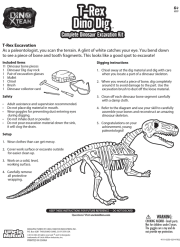
WARRANTY AND SUPPORT

Science4you products are designed for quality and educational value. For any questions, missing parts, or support needs, please contact Science4you customer service. Refer to the product packaging or the official Science4you website for contact details and warranty information.

Additional educational resources and activity guides are available online. Visit the [Science4you Store](#) for more information.

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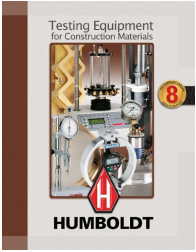




Related Documents - 4114



The image shows the packaging for the Uncle Milton Dino Dig Excavation Kits. It features a large illustration of a T-Rex skeleton and text describing the kit's contents and purpose. The text includes 'Uncle Milton's Dino Dig', 'T-Rex, Ceratosaurus, Stegosaurus', and 'Discover the excitement of paleontology with Uncle Milton's Dino Dig excavation kits. Each kit allows children to excavate, clean, and assemble a realistic dinosaur skeleton, including the T-Rex, Ceratosaurus, and Stegosaurus. Includes all necessary tools for a complete excavation experience.'

[Uncle Milton Dino Dig Excavation Kits - T-Rex, Ceratosaurus, Stegosaurus](#)

Discover the excitement of paleontology with Uncle Milton's Dino Dig excavation kits. Each kit allows children to excavate, clean, and assemble a realistic dinosaur skeleton, including the T-Rex, Ceratosaurus, and Stegosaurus. Includes all necessary tools for a complete excavation experience.

	<p>Humboldt Testing Equipment for Construction Materials - Catalog</p> <p>Humboldt Mfg. Co.'s 8th edition catalog features a wide range of testing equipment for construction materials, focusing on soil analysis, density, moisture, and compaction. Discover advanced gauges, meters, and apparatus for quality control and project compliance.</p>
	<p>Makita Angle Cutter 4112H 4114 Instruction Manual</p> <p>Comprehensive instruction manual for Makita Angle Cutters models 4112H and 4114, detailing safety precautions, specifications, operational procedures, maintenance guidelines, and warranty information.</p>
	<p>Xaralyn Bio Ethanol Burner Installation, Maintenance, and Safety Guide</p> <p>Comprehensive guide for installing, maintaining, and safely operating Xaralyn bio ethanol burners. Includes dimensions, troubleshooting tips, and warranty information.</p>
	<p>Noaton DF 4114 Air Dehumidifier Instruction Manual Operation & Maintenance</p> <p>Detailed instruction manual for the Noaton DF 4114 air dehumidifier. Covers features, operation, control panel functions, maintenance, troubleshooting, and safety warnings regarding R290 refrigerant.</p>
	<p>Safewaze D-Plate Anchor 024-4114: Installation, Safety, and Use Manual</p> <p>Comprehensive guide for the Safewaze D-Plate Anchor (Model 024-4114), covering installation, safety standards, limitations, applications, inspection, and maintenance for fall protection systems.</p>